

MEMBER
NATIONAL PEST CONTROL ASSOCIATION
HEADED BY AN ENTOMOLOGIST

JAN/FEB 2008
Vol. 20 No. 1

The Pest Bulletin

PRSRST STD
US Postage
PAID
PERMIT NO 496
Berkeley, CA

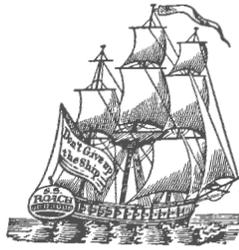
McKINZIE PEST CONTROL
A McKINZIE INC. COMPANY

www.pest-free.net
209 Commercial • Emporia, KS 66801 • (620) 342-4222
1129 Hayes Dr • Manhattan, KS 66502 • (785) 776-6063

Cockroaches Through History

Early cockroaches were larger than those existing today, but otherwise they have changed little in the 300 million years they've been around. They are truly a marvel in design when it comes to surviving, multiplying, adapting to changes around them, and dispersing.

The three major cockroach species—the *American*, *Oriental*, and *German* cockroach—despite their names, all originated from North and West Africa. They spread world-wide by hitching rides on early trading ships. The German and Oriental roaches found their way from Africa to Europe in the Middle Ages, then reached America



several centuries later via early ships from Europe.

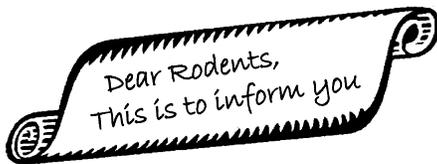
Sailing ships became so infested with cockroaches that sometimes the entire store of provisions was in danger of being eaten or spoiled by these scavengers. In a desperate but futile attempt to deal with this situation, ship captains sometimes held official "roach hunts". A typical prize for a thousand cockroaches was a bottle of brandy. The *Danish Navy Annals* of 1611 A.D. records one hunt of this sort

that yielded 32,500 cockroaches!

Today cockroaches are a common and widespread pest. They are found virtually everywhere, even on offshore oil platforms and in heated facilities in the Arctic. Besides being a nuisance and embarrassment, they spoil food, spread numerous disease-causing germs, and cause serious allergies even to children. In addition, they love to crawl into warm, tight places, and have been known to cause equipment malfunctions, damaging everything from super computers to kitchen clocks and radios.

Pest Control Urban Myths

A creative but ineffective method the Ancient Greeks used to try to rid their homes of mice was to *write a letter to rodent pests*. Often these letters were polite, simply asking the mice to leave, but specific threats were added if the pests didn't move out. While we might



laugh at such ridiculous attempts to control mice and rats, there are countless urban myths about pest control today that are equally ineffective. Some of these you can find as recommendations on internet sites. Here is a sampling.

Control moles and gophers by placing Wrigley's Juicy Fruit gum in their burrows. The idea is that the rodents eat the gum, which then "gums up" their insides, causing them to die of constipation. What a great revenge!

Unfortunately, research shows that it doesn't work.

Corn grits kill ants. Supposedly, corn grits will expand inside ant stomachs, causing them to explode. A similar recommendation states that *supplying carbonated soft drinks* to mice will cause them to bloat up to the point of exploding. Another recommendation is to *mix 50% plaster of paris or portland cement with rat food*, which is supposed to kill rodents by hardening in their intestines. All of these have been tested by scientists and found to be totally useless, though often portrayed as helpful advice.

Avon's Skin-So-Soft bath oil is a good mosquito repellent. In tests, this product failed to protect people from mosquitoes in less than 10 minutes, versus a product that contained 24% DEET that kept mosquitoes away for 5 hours.

Remember, don't believe everything you hear or read!

Pest Prevention Tip of the Month

When putting away holiday decorations in the attic, make sure your roof and gable vents are clear of stored items. Unobstructed vents are needed to allow moist air to escape, in order to decrease the possibility of certain pests, as well as mildew and condensation.

Pesthomes.com

- Free Home!
- Free Food and Water!
- Humans Don't Care!
- No Pest Control Services!

Another successful late night web search

Lady Beetle Invasions

Asian Lady Beetles, unlike our native lady beetles (popularly called 'lady bugs'), were introduced into this country to control pests in crops, but soon started to cause problems because of their habit of invading homes in the fall and overwintering in them.



ASIAN
LADY BEETLE

Customers are often amazed that these and other pest invaders can enter a home without any apparent entry sites. New research results reported in the *Journal of Economic Entomology* (October 2007) show that these beetles cannot enter 2 mm-size gaps. However, some of the smaller beetles (they vary slightly in size) can enter 3 mm gaps, and even the largest beetles can enter 4 and 5 mm gaps.

To reduce the numbers of these beetles invading, consider switching the mesh size of screens covering chimneys, attic vents, foundation vents, and exhaust vents to a maximum of 2 mm, especially on walls that face afternoon sun, where the beetles are most likely to land. The authors point out, however, that reducing mesh size in itself will not be very successful in keeping out these invaders. Even in well-constructed homes, determined beetles will find many other openings that are large enough for them to enter.

It was also observed that beetles often vigorously attempt to force their way into even smaller openings, so they may be able to 'muscle' their way into smaller crevices if the cracks are bordered by physically yielding materials such as foam, or soft rubber weather stripping.

New, Largest Spitting Cobra Found

A new species of spitting cobra—the largest in the world—was recently discovered in Kenya. The new Ashe's spitting cobra is a massive snake that can grow to more than nine feet long and can deliver more venom with a single bite than any other cobra on the planet—enough to kill 15 to 20 people.

Spitting cobras use their venom for both killing prey, and for defense. They can deliver the venom with a bite, or spray their venom up to several yards, usually aiming for an attacker's eyes to give the snake time to escape. If the venom hits the eyes directly, the victim is often permanently blinded.



Your Questions Answered

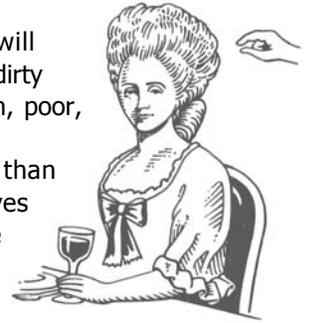
Q. Who is most likely to get head lice?

A. Head lice are equal opportunists—they will attack you regardless of whether your hair is dirty or clean, long or short, or whether you are rich, poor, young, or old.

Children contract head lice more often than adults simply because their play often involves direct head-to-head contact, and they share personal items like combs, brushes, and coats.

NOTE: Head lice are an age-old problem.

Even in 16th Century Germany, a document on proper manners advised, "Never scratch your head, or fish out lice" when you are having a meal. Recorded by a predecessor of Miss Manners?



Bee Defense Strategies

Most everyone has fallen victim to a honeybee's painful sting—this is the tactic bees use most often to protect their colony. But stinging is only one of several methods honeybees use to defend their colonies against intruders. Asian honeybees kill *giant hornets* that attack their colony using a method called "thermo-balling." The bees mob and cover the huge intruder, raising its body temperature to lethal levels.



Now another novel method of bee defense has been discovered. French researchers have found that Cyperian honeybees kill their arch enemy, the *Oriental hornet*, by asphyxiation. This hornet has a high temperature tolerance, so thermo-balling isn't effective. Instead, honeybees mob the intruder in such numbers that the hornet is smothered to death. The bees have even learned to press on the hornet's abdomen as they cover the insect, a technique that speeds asphyxiation of the hornet.

Butterfly Reserve Being Protected

President Calderon of Mexico unveiled a sweeping plan in November, committing \$4.6 million additional funds to help protect the *Monarch Butterfly Biosphere Reserve*. This key area in the mountains of central Mexico is where up to 250 million monarchs, mostly from the Eastern U.S., overwinter. The Mexican government is trying to encourage tourists to visit the reserve to help support the local economy.



Only in this area, in the fir trees at 10,000 feet (and along the California coast for western monarchs), do the butterflies find the perfect conditions to spend the winter. But lumber thieves have dangerously reduced the number of fir trees, fragmenting the rare forests. The tree canopy acts somewhat like a giant hot-water bottle, keeping the area underneath warmer and more humid, perfect for the monarchs. Removing trees causes heat loss through the canopy, destroying the "delicate envelope" the butterflies need to survive the winter.

The monarchs that spend the winter in Mexico do not reproduce until they return to the U.S. in late March. They cycle up to five generations, gradually moving north, before the great-great-great grandchildren of the butterflies that left Mexico head south again—a truly unique journey.